# Comments on SSA Proposed Management Goals Hal Boyton

### 1.Striving to exceed MSH

This will only be effective if the habitat can support more fish. We need to install smolt traps now to measure habitat capacity. In the Kalama we now have data that shows that the habitat cannot support more fish.

### 2. Improving protection for juveniles

Single braless hooks and artificial only is not necessary to protect juveniles and the impact of a bait ban would have a major negative impact on our recreational fisheries. Most harvest fisheries on Steelhead and Chinook require bait to be effective. We want the hatchery summer Steelhead to be harvested.

The time/area closures on all sport fishing during the smolt outmigration period reduces the impact to juveniles significantly.

Fry and parr, the only fish left in river after May, are seldom hooked on large baits on large hooks aimed at anadromous adults. Fry and parr are often hooked on flies and small spinners. The selective fishery rules will not avoid this impact.

Barb less hooks sometimes cause more mortality than barbed, because they penetrate through the fish to the eye or cause bleeding due to deep penetration. The selective fishery rule will not avoid this impact.

Double and treble barbed or barb less hooks do cause high mortality due to hooking the fish in the lower and upper jaw which causes difficulty in hook removal. These should be banned.

## 3.Recovering seasonal runs and other life history traits.

We agree that the historic early Steelhead runs, which still were a major part of the wild Steelhead population in the 70's, are depressed due to the intense sport and tribal harvest aimed at segregated hatchery Steelhead. These should be rebuilt if possible. However, this goal appears impractical unless the tribes change to a selective fishery on the segregated stocks or if we change to integrated hatchery programs also with selective fisheries by the tribes.

# 4. Offering fisheries for MSR vs MSH.

Most of the Steelhead fishermen still want to retain a fish as shown by the last survey.

When asked if fishermen would release wild fish when both wild and hatchery fish were available, the majority would do so.

When asked what the annual retention limit for wild Steelhead, 82% wanted this limit greater than 1 fish.

5. Minimizing the negative effect of hatchery programs.

There is no evidence that hatchery programs are the problem.

We have stopped hatchery planting on most of Hood canal, the Cedar, the Nisqually and the runs have not rebounded. Canadian rivers in the lower mainland north of Vancouver in roadless areas, where no hatchery fish have ever been planted, are showing major declines in wild fish.

It would be acceptable to continue the Sauk and Nisqually as wild fish management zones.

The other recommendations of the hatchery reform group should be implemented.

#### 6. Research

You can't fix the problem unless you define the problem. We haven't defined the problem. Research is the most important new activity.

- 6.1 Continue acoustic tagging to determine the areas of major juvenile mortality.
- 6.2 Install smolt traps prior to the 2007 outmigration. Mark-recapture the smolts to determine the total quantity. The adult-to smolt ratio is the best measure of freshwater habitat capacity. If this does not show that larger parent escapements produce larger smolt outmigrations, the freshwater habitat is a limiting factor.
- 6.3 Monitor the predation. Coded wire tags in BC showed that 37% of the Steelhead in the Nanaimo River was being consumed by Pinnipeds; the tags were wanded in the scat on an island.
- 6.4 Monitor the plankton, the food supply of the juviniles. Teams with other entities for this and other research. In BC one biologist claims to be able to predict the run size based on the plankton supply during juvenile outmigration.
  - 6.5 Monitor the water quality in Puget Sound and Hood Canal.
- 6.6 Experiment with new hatchery techniques such as integrated. Triploids? Release in estuary to avoid in river mortality? Barge to Neah bay to avoid Puget sound predation (not as a solution, but to verify predation affects). Generate a new Puget sound summer Steelhead hatchery stock using fish captured at Sunset falls on the So. Fk. Skykomish. These fish, although originally from Skamania, have developed the largest wild run in Puget Sound. No hatchery fish have been planted in the S Fk Sky for 25 years although Reiter hatchery strays do enter the trap and are now passed upstream.

- 7. Wild Steelhead management zones. We have them now. There is no need to expand.
- 1 Most of Hood canal
- 2.Nisqually
- 3.Sauk
- 4,Tolt
- 5.All the small streams in lower Puget Sound. Maybe we need to monitor the escapement in a few streams here to compare to the Nisqually or Puyallup on a yearly basis.